

CEDAR CITY AUTOMOTIVE REPAIR SHOP, AUTOMOTIVE  
REPAIR SHOP  
820 North Main Street  
Cedar City  
Iron  
Utah

HABS UT-139-A  
*UT-139-A*

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN BUILDINGS SURVEY  
National Park Service  
U.S. Department of the Interior  
1849 C Street NW  
Washington, DC 20240-0001

HISTORIC AMERICAN BUILDINGS SURVEY  
CEDAR CITY AUTOMOTIVE CENTRAL REPAIR SHOP,  
AUTOMOTIVE REPAIR SHOP

HABS No. UT-139-A

Location: 820 North Main Street, Cedar City, Iron County, Utah.  
UTM Zone 12, Easting 318326, Northing 4173589.

Present Owner/Occupant: United States Department of Agriculture (USDA) Forest Service, Dixie National Forest.

Present Use: Working Capital Fund (WCF) Repair Shop

Significance: The Cedar City Automotive Central Repair Shop was one of four central repair shop sites established by the federal government in the intermountain region of the western United States to service vehicles and machinery used by the Civilian Conservation Corps (CCC). The main building on the site was called the Automotive Repair Shop and was built in a simplified Modernistic style. Its segmentally arched truss roof is unusual when compared to other Forest Service buildings of the era and, generally, the building's style marks the adoption of more modern forms of architectural design by Forest Service regional architects and engineers in the late 1930s. As a whole, the Cedar City site is one of the few tangible reminders of the infrastructure developed to house and serve the CCC program: the other three repair shops have been demolished or significantly altered, as have most of the CCC camps in the region.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of erection: 1939. Cedar City deeded a 5.18 acre parcel of land (later calculated at 5.42 acres) to the United States Government on February 11, 1939, for the purpose of erecting a central repair shop for vehicles used by the Civilian Conservation Corps. USDA Forest Service Region 4 Engineering prepared a "Site Plan Showing Sewage Disposal Plan" in April, followed by a site improvement plan in May (see HABS No. UT-139, Supplemental Material, Figures 1 and 2). Both plans depicted the proposed size, location, and use of the three principal buildings on the site, including the Automotive Repair Shop. Six

sheets of plans for the latter building were finalized on July 7, 1939, with revisions dated through October (see HABS No. UT-139, Supplemental Material, Figures 5-8). A July 27 article in the *Iron County Record* reported that a commence work order had been received: “The project calls for the construction of several buildings of various types, all of which must be completed within ninety days.” Site grading was underway by August 3, with work on the buildings expected to begin in a few days.<sup>1</sup> Due to a dispute over jurisdiction, the shops, which had been completed at a cost of about \$30,000, sat empty until September 1940, when the CCC assumed responsibility.<sup>2</sup>

2. Architect: USDA Forest Service, Region 4 Engineering. The original plans for a CCC Automotive Repair Shop in Region 4 were presented in the Forest Service’s 1938 book, “Acceptable Plans, Forest Service Administrative Buildings.” However, Calvin Spaun prepared a far more distinguished design that incorporated the office and heating plant within the main body of the shop, resulting in a rectangular building with no service wing. Spaun also added a monumental entrance bay, parapets, and Art Deco details.

Early in his career, Spaun had worked with the Ogden firm of Hodgson and McClenahan, which was responsible for the Art Deco Forest Service Regional Office (1933-34) and later the Ogden High School (1937) and Ogden Municipal Building (1939).<sup>3</sup> Spaun’s employment with the regional office had begun by 1934, when he was a temporary employee of Region 4 Engineering under the either the ECW, NIRA or CWA programs. By 1956, Spaun was the only architectural staff aside from the regional architect; he retired in 1965.<sup>4</sup>

Spaun’s experience with public architecture and his familiarity with Art Deco design informed his central repair shop design and may have earned him the job of designing an alternative plan. The four central repair shops were the first large, industrial-type buildings in urban settings designed by Region 4, and the use of modernistic design elements and modern materials represented a departure from the more traditional building forms and materials of the preceding years. The designs were certainly influenced not only by the required size and use of the buildings but by current trends for both public buildings and industrial structures.

Arval L. Anderson was the Regional Engineer from 1939 to 1959 and all work was conducted under his supervision. The drawings were checked and approved by George L. Nichols (Architectural Engineer) and also approved by George E. Kreizenbeck (Construction Supervisor).

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<sup>1</sup> *Iron County Record*, 3 August 1939.

<sup>2</sup> *Iron County Record*, 16 May and 22 August 1940.

<sup>3</sup> All of these buildings have been listed on the National Register of Historic Places.

<sup>4</sup> Richa Wilson, *Within a Day’s Ride: Forest Service Administrative Sites in Region 4, 1891-1960* (Ogden, UT: USDA Forest Service Intermountain Region, 2004), p. 122.

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High construction estimates for Spaun's alternative design forced major modifications to the Automotive Repair Shop, and these were apparently effected by discarding the alternative design and reverting to the Region 4 CCC Central Repair Shop plan as printed in 1938.<sup>5</sup> In his journal, George Nichols first mentioned plan revisions on June 15, 1939; these were being made by Spaun, Lloyd C. McDonald, Jr., and a Mr. N. Pidgeon, who seems to have been responsible for the bulk of the work.<sup>6</sup> On June 28, Region 4 was visited by none other than W. Ellis Groben, Consulting Architect in the Washington Office of the Forest Service, whom Nichols escorted around the region for about ten days to visit and discuss various project sites in Utah and Idaho, including the Salt Lake City repair shop site. Nichols and Groben spent at least two days revising and finalizing the shop plans together.<sup>7</sup> While no designer was listed on the final drawings, Groben approved them on July 6-7 before he returned to Washington; Pidgeon and Nichols also approved and signed them.

The unifying hand behind the site plan and building design was Nichols (1896-1972), a Utah native. Nichols was hired by Region 4 as a draftsman, was promoted to chief draftsman in 1924, and later to architectural engineer; he retired in 1956 as the Regional Architect.

3. Original and subsequent owners, occupants, and uses: United States government, 1939 to present. The governmental agency with jurisdiction over the site has changed over the years. The site was designed and constructed by the Forest Service and then turned over to the CCC in 1940. With the advent of World War II, the CCC declined and was terminated by Congress in 1942, when the Ninth Corps Area of the US Army assumed control of the site. In 1943, the site and all buildings were transferred to the US Grazing Service (shortly to become the Bureau of Land Management, or BLM).

The BLM assumed responsibility and use of the site but, in 1972, agreed to share space with the Forest Service. This raised a series of questions concerning the legal owner of the property that apparently wasn't resolved until 1979, when the agencies signed a Memorandum of Understanding (MOU) governing joint use of the site. The Forest Service assumed responsibility for the maintenance of the three historic buildings on the site: the Automotive Repair Shop, the Utility Building, and the Gas and Oil House.

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<sup>5</sup> USDA Forest Service Division of Engineering, Acceptable Plans, Section F.

<sup>6</sup> McDonald was hired on June 16, 1939, as a Junior Engineering Draftsman to work on revising shop plans. Nichols listed his home address as 390 South 4<sup>th</sup> West, Logan, Utah [George Lee Nichols Collection, MS 78 (Box 2, Folder 21), 16 June 1939]. Pidgeon may have been sent to Region 4 from the Washington Office specifically to make plan revisions – he and Nichols worked closely together on the shop plans through the month of June, but there is no other mention of him in the journal.

<sup>7</sup> George Lee Nichols Collection, MS 78 (Box 2, Folder 21), 27 June - 6 July 1939.

Typically the agency with jurisdiction over the site has also been the primary site user, and all of the agencies have used the Automotive Repair Shop for its original purpose, the repair and maintenance of vehicles and heavy equipment. Beginning in the 1970s, space has been leased to other governmental agencies or sub-agencies. Both the Working Capital Fund (WCF) of the Forest Service and the General Services Agency (GSA) have used the Automotive Repair Shop to maintain vehicles. Today the Automotive Repair Shop is used for vehicle and equipment maintenance, although in a reduced capacity, and also for storage.

4. Builder, contractor, suppliers: The Automotive Repair Shop was built by the United States government. George Kreizenbeck, a Forest Service employee who had been overseeing the CCC camps on the Payette National Forest, was transferred to Ogden to supervise the construction of the four CCC central repair shops in Region 4, including the one in Cedar City. After failing to receive bids from Cedar City contractors that met budget requirements, the Forest Service chose to build using force account labor. William Woods, an engineer from Region 4, supervised the site grading and preparation.<sup>8</sup> According to the local newspaper, efforts were made to hire a local contractor to supervise construction but none was available, and it is assumed that Forest Service personnel purchased locally available materials and supervised Forest Service labor.

5. Original plans and construction: The proposed drawings for the Automotive Repair Shops in Region 4 were contained in four sheets dated May 1 and 2, 1939 (see HABS No. UT-139, Supplemental Material, Figures 3 and 4). Spaun prepared the plans, elevations, and details while “H. F. H.,” also of Region 4 Engineering, prepared details for the steel trusses and bracing. The plans specified a rectangular mass with a basement boiler room topped by a two-story office, all contained within a corner of the shop rather than in a separate wing, as later built. The elevations depict a building with the same mass and scale as the present building but with much greater Art Deco detail, particularly around the off-center entrance axis on the long sides of the building. Both end walls were fenestrated, and two levels of windows were incorporated in the walls of the two-story office section. Banded parapet walls masked an internal roof drainage system and corrugated concrete panels added decorative detail beneath the windows. These plans were eventually given the Region 4 standard plan number 39CAA, although this designation is not noted on the drawings other than by a handwritten note added at a later date. The initial design for the Utility Building was quite similar in massing, roof shape, fenestration patterns and materials, door schedules, and decorative details.

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<sup>8</sup> Francis W. “Bill” Woods was employed by the Forest Service as a draftsman by 1924 and was promoted to Associate Civil Engineer in January 1937. He retired in 1958 (USDA Forest Service, Region 4 files).

Six sheets of revised drawings (only five of which were located) were dated July 6 and 7, 1939 (see HABS No. UT-139, Supplemental Material, Figures 5-8); these were nearly identical to the Region 4 plan for a CCC shop presented in the 1938 "Acceptable Plans" handbook. The 1939 drawings comprise 1: plans (with variations for each of the four repair shop sites as determined by topography and site layout), 2: partial elevations, 3: wall sections, 4: truss details, and 5: heating plans and details (varying by site depending on the most economical fuel source – coal for Cedar City). No designer was noted for the plans, elevations, and sections; "V. L. D." and "Q. P." designed the trusses; and "Crane Co., E[ngineers]" and "R-4 Engineers" designed the heating plans.<sup>9</sup> Drawings were generally approved by Groben, Nichols and/or Pidgeon. An undated sheet of two small drawings, photocopied onto 11x17 paper, was also located; it detailed the sliding door elevation and wheel guard on the boiler room of the new wing and was likely prepared in September 1939.

The Cedar City shop was built according to the revised drawings (see photographs taken shortly after construction in HABS No. UT-139, Supplemental Material, Figures 15-17). The drawings specified a slightly longer and narrower building than Spaun's alternative, eliminated the grand entrance axis on the long sides and all but vestiges of the Art Deco detail, and removed the office and heating plant to an ungainly, gable-roofed, single-story wing projecting from the side of the building. Additional drawing revisions were dated through October 1939, although it is unclear if these revisions pertained to the Cedar City shop or to one of the other three shops in the region.

6. Alterations and additions: The single addition made to the shop dates to 1942 and is detailed in the plan "USDA Forest Service, Roof and Enclosure for Coal Dock" (see HABS No. UT-139, Supplemental Material, Figure 14). The existing open coal dock that projected eastward from the south end of the south wing was covered with a shed roof and enclosed with wood-framed walls finished with stucco. Multi-paned wood windows were specified for the south, east, and north walls of the new enclosure, as were two coal chutes in the east wall.

Additional improvements were made in 1942 and included adding concrete paving around the south, east, and north sides of the shop; pouring a three-inch concrete floor over the existing floor in the main part of the shop; repairing floor cracks and pouring a new floor in the washroom of the office wing; and pouring new footings under settled walls on the south and east walls of the wing and on

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<sup>9</sup> "V. L. D." was Verne L. Despain, who was hired as a temporary employee in Engineering under a relief agency program in 1934. By 1941 he was working with the Roads and Trails section of the regional office and by 1966 was the branch chief of Civil Engineering (USDA Forest Service, Region 4 files).

the south wall (east end) and east wall (south end) of the main shop (see HABS No. UT-139, Supplemental Material, Figures 12 and 13).<sup>10</sup>

Exterior alterations to the main shop are largely confined to changes in door and window locations and materials. The garage door at the west end of the north wall that was visible in ca. 1939 and 1960 photographs (see HABS No. UT-139, Supplemental Material, Figures 17 and 21) was removed and replaced with steel windows and a concrete breast wall very similar to the original windows and walls, and a man door was added on the north end of the west end wall. These changes may or may not have been contemporaneous, but both occurred before August 1965. All other changes appear to date to after 1965 and before 1998 based on available photographs (see HABS No. UT-139, Supplemental Material, Figures 19-24). Four metal ventilation fans were added along the apex of the arched roof of the main shop. The original wood, glazed, overhead garage doors on the east and west end walls were replaced with unglazed metal overhead doors in 1991.<sup>11</sup> All man doors have also been replaced. The roof covering has been replaced several times, most recently in 2002.

Exterior alterations made to the office wing probably date to the 1960s and 1970s. On the west wall, the south window was removed from the north set of three windows and the opening filled and covered with stucco. The man door immediately south was also removed and the opening filled and stuccoed to match the adjoining walls. The glazed, six-light double doors further to the south were initially replaced with glazed, four-light, wood-paneled doors very similar or identical to the extant double doors on the south wall. Later, these were replaced with a single door with single-pane glazing flanked by a wood and glass sidelight. On the south wall, the west window was converted to double doors. The original rectangular concrete boiler stack was replaced with a cylindrical metal stack, although a low portion of the concrete plinth was retained. All three of the coal dock windows were replaced with sheets of painted plywood between 1965 and about 1998.

The interior of the main shop remains largely unaltered. The revised drawings specified a paint spray booth in the northwest corner (accessed via the north garage door) and a parts washing facility in the southwest corner but it is unclear if they were built. Interior photographs from the 1965 flood indicate that the paint booth, if ever present, had been removed, windows had replaced the north garage door and the man door had been added in the west wall (see HABS No. UT-139, Supplemental Material, Figure 23). The two original recessed floor lifts are now disused, replaced by a newer surface-mounted lift. A wood-framed wire cage was constructed in the southeast corner for locked storage. Fluorescent lights were

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<sup>10</sup> Further details are provided in the drawings "USDA Forest Service, Betterment Work, Automotive Central Repair Shop," (January 9, 1942) and "USDA Forest Service, Revised – Improvement Plan, Automotive Central Repair Shop, Cedar City, Utah" (1942).

<sup>11</sup> Interview with Marian Jacklin, Archaeologist, Dixie National Forest, 6 April 2009.

added in the early 1990s, replacing the hanging metal fixtures that were original to the interior.<sup>12</sup> In about 2007, a used oil heater was installed near the hall to the office wing to supplement the coal-fired boiler.

Interior alterations to the office wing are somewhat more complex. The plans called for an office in the northwest corner of the wing with triple windows on the north and west sides, looking into the main shop and yard respectively, and single doors to the exterior and the interior hall toward the south end of the room. A toilet was specified in the northeast corner, lit by a single narrow window and separated from the office by an interior hall leading to the main shop. To the south of both rooms was to be a large parts room that had double doors opening from the center of the west wall, flanked by two windows. (It appears that the locations of the double doors and the north window were reversed during construction). There were also to be two wide windows in the east wall (although it appears that the north window was never built) and a single window in the south wall. A boiler room was specified for the southeast corner of the wing, accessed by a sliding door in the south wall and lit by a window and narrow door in the east wall that overlooked the open coal dock.

It is unclear to what extent the original specifications were followed but, with the exception of the boiler room and coal dock, the interior layout has been reconfigured. In the 1970s, the office was extended southward and entered from the double doors that originally led to the parts room. The office door to the interior hall, if ever built, was blocked, while a door was added leading directly into the shop through the north wall. It may have been at this time that alterations to door and window openings in the west and south walls were made to accommodate changes in circulation. The original toilet was converted to a storage room and a smaller single-stall toilet with a shower was added immediately to the south. The large parts storage room was divided into an open storage area south of the toilet, a walled storage room to the west, and a walled woodshop in the southwest corner.

B. Historical Context:

See the Narrative Overview in HABS No. UT-139 for a complete discussion. In summary:

The Cedar City Automotive Central Repair Shop was designed and constructed under the supervision of the USDA Forest Service in 1939. The site was one of four central repair shops established by the federal government in the intermountain region of the western United States to service vehicles and machinery used by the CCC. President Franklin Roosevelt had established the

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<sup>12</sup> Interview with Dale Peterson, Head Mechanic (ret.), WCF Repair Shop, 8 April 2009, and interview with Jacklin, 6 April 2009.



CCC in 1933 as one of the cornerstones of his New Deal, a comprehensive suite of short-term economic recovery and reform programs designed to relieve the effects of the Great Depression. The CCC program was intended to stabilize, restore, and improve natural resources on federal lands while providing work for unemployed young men.

Roosevelt appointed Robert Fechner as the Director of the CCC, and he worked in concert with an advisory council comprising representatives from the Departments of Labor, War, Agriculture, and Interior. The Department of Labor supervised the selection of enrollees for the CCC camps while the Department of War oversaw physical conditioning, transportation, camp construction and administration, and supplies. The Departments of Agriculture and Interior planned and conducted the CCC work projects on national, state, and private forests and parks, respectively.

By the late 1930s Fechner recognized the need for centralized repair facilities for CCC vehicles and equipment.

The CCC used a vast amount of motorized equipment in the course of its extensive operations, the responsibility for repair and maintenance of which had always lain with the co-operating agencies. In 1939 Fechner decided to alter this policy, proposing to set up a huge chain of central machine repair shops directly under his control. All repairs of CCC machinery would henceforth have to be carried out there, and the director's office, not the technical services or Army, would hire and pay the mechanics and other employees.<sup>13</sup>

Within the Forest Service, the need for centralized repair facilities for the forests in general and the CCC in particular had long been recognized, and planning for automotive central repair shops had begun in 1938 or earlier. The Washington Office published a book of acceptable building plans for its administrative buildings that included a section on shops and service buildings.<sup>14</sup> Five of the plans were for CCC central repair shops, including a design for Region 4 that is nearly identical to the automotive repair shop that would be built at Cedar City.

Advanced planning and construction of the automotive central repair shops began in earnest in late 1938, immediately after the President reaffirmed Fechner's authority over the CCC. On February 7, 1939, the Intermountain Regional Forester directed a memorandum to the supervisors of the Dixie, Boise, and Toiyabe National Forests stating that, "The Chief of the Forest Service has finally

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<sup>13</sup> John A. Salmond, The Civilian Conservation Corps, 1933-1942: A New Deal Case Study. (Durham, NC: Duke University Press, 1967), pp. 174-75.

<sup>14</sup> USDA Forest Service Division of Engineering, Acceptable Plans, Forest Service Administrative Buildings (Washington, DC: USDA Forest Service, 1938), Section F.

agreed to proceed with Mr. Fechner's plan for establishing central repair shops for the maintenance of all CCC equipment." In a very short time, the Forest Service's Intermountain Region (Region 4) established central repair shops in Salt Lake City and Cedar City, Utah; Boise, Idaho; and Reno, Nevada. These repair shops were located roughly at the four corners of the region and serviced vehicles used by the Forest Service, National Park Service, Division of Grazing, and Soil Conservation Service CCC camps. The Cedar City shop was responsible for vehicles and heavy machinery in the central and southern parts of Utah and Nevada, and the first shop superintendent reported that it would serve 14 CCC camps.<sup>15</sup>

While the Army was responsible for CCC camp construction, the national forests and parks were responsible for creating and designing all projects conducted by the CCC, ranging from trails and roads to bridges and buildings. In Region 4, the Forest Service Engineering division in Ogden, Utah, conducted all of the design work, including that for the central automotive repair shops. Initial site plans indicated that three buildings were slated for immediate construction: the Automotive Repair Shop, Utility Building and Gasoline and Oil House. Up to four more per site were planned for the future.

The four central repair shops were the first large, industrial-type structures in urban settings designed by Region 4, and the use of Modernistic design elements and modern materials represented a departure from the more traditional building forms and materials of the preceding years. Designs for the Automotive Repair Shop and the Utility Building were certainly influenced not only by the required size and use of the buildings but by current design trends for both public buildings and industrial structures. In fact, a contemporary forest service publication written by Groben, as Consulting Architect in the Washington Office, exhorted that "Major Repair Shops, located usually in cities or towns... should be designed after the fashion of the modern commercial shop and in accordance with the best engineering practice."<sup>16</sup> Mere pragmatism probably dictated the use of a pre-existing traditional Region 4 plan for the simple Gasoline and Oil House. However, the fortunate combination of the two modern buildings with the traditional building captures a transitional period in the designs of Forest Service regional architects and engineers in the late 1930s as the agency continued to expand and seek a coherent architectural identity.

Cedar City bids were opened on May 16, but these were "considerably higher than bids on similar jobs throughout the western states" and no contract was let.<sup>17</sup> By the end of July, with economizing measures in place, it was announced that

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<sup>15</sup> *Iron County Record*, 22 August 1940.

<sup>16</sup> W. Ellis Groben, Principles of Architectural Planning for Forest Service Administrative Improvements (Washington, DC: USDA Forest Service, Engineering Division, 1938), p. 57.

<sup>17</sup> *Iron County Record*, 16 May 1939.

the shops would be erected on force account; the Cedar City shop was nearly complete by the end of September.<sup>18</sup> Despite the push to design and construct the shops, the three Cedar City buildings sat empty for a year due to a struggle for control of the CCC between the director and the advisory council.<sup>19</sup> By mid-May 1940 it was decided to place the repair shops under the control of the CCC rather than the Forest Service.

The Cedar City shop functioned smoothly for about a year under the CCC but it is unclear how successful this centralized system would have been in the long term. Disadvantages included inefficiency of operations (e.g., towing broken trucks up to 500 miles away for even simple repairs), a diminishment of economic benefit to local communities because local labor and materials were bypassed, and a resultant decrease in goodwill between the communities and the camps.

The CCC remained popular through its final days but was doomed by its strong association with relief work, viewed as increasingly unnecessary in light of the United States' entrance into World War II in December 1941, the improving wartime economy, and the need for young men on farms, in industry, and ultimately on the battlefield. In June 1942 Congress refused to appropriate money for the CCC and it was officially terminated.

In April 1942, Roosevelt ordered that all CCC automotive repair shops be transferred to the Army along with approximately 10,000 pieces of automotive equipment.<sup>20</sup> At Cedar City, the two civilian administrators and ten mechanics were to be retained and the shop used both to overhaul CCC trucks and equipment for Army use and to train soldiers as mechanics.<sup>21</sup> This change in use prompted plans for betterment work at the shop in June 1942, including concrete paving on the approach road from Main Street and around all sides of the Automotive Repair Shop; new footings under a failing portion of the shop's south wall; reconstruction of a damaged portion of the shop's east wall; and the installation of a roof and enclosing walls over the shop's coal dock.

The Army transferred the site to the U. S. Grazing Service in November 1943 with the assumption that it would be shared with the Forest Service. However, a misunderstanding over land ownership and site jurisdiction caused the Forest Service to relinquish any claim to or use of the lot until the 1970s.

In 1946, the Grazing Service and the GLO were merged under the Department of the Interior to form the BLM. By 1946, the BLM had assumed sole responsibility

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<sup>18</sup> *Iron County Record*, 27 July 1939.

<sup>19</sup> *Iron County Record*, 15 August 1940.

<sup>20</sup> *Iron County Record*, 23 April 1942.

<sup>21</sup> *Iron County Record*, 7 May 1942.

and use of the Cedar City repair shop, which became known as either the BLM Yard or, more formally, the Cedar City Administrative Site by the early 1960s.

In 1972 the Forest Service began seeking a new home for its Cedar City WCF Shop because of fund reductions and a directive that all federal agencies share items and sites when feasible. A May 19 memorandum from the Dixie Forest Supervisor to the Regional Forester stated that the BLM had given approval for the Forest Service to occupy the Cedar City shop and an MOU was prepared and signed that granted the east half of the Automotive Repair Shop to the Dixie National Forest for the purpose of maintaining WCF vehicles and equipment assigned to the Dixie. By early 1973, however, the Forest Service had realized that they might still be the legal owners of the site and lengthy wrangling over site jurisdiction ensued. During this period the agencies retained joint use of the shop, with the Forest Service “operating a full time repair shop with two mechanics on duty” and the BLM using their half of the building for vehicle and material storage.<sup>22</sup>

In December 1974 the BLM concluded that “whereas the BLM owns the property on the site and has made use of both the site and property for the past 31 years, the U. S. Forest Service is the owner of record based on a gift deed from the Mayor of Cedar City.”<sup>23</sup> In 1979 a new MOU was prepared in which the Dixie National Forest and the Cedar City District of the BLM agreed to develop an annual operating plan for site use, maintenance and repair, with the Forest Service taking major responsibility for the site and buildings. An associated site plan indicates that the BLM retained the use of its buildings and corrals on the east end of the site and 100% control of the Gasoline and Oil House, that the Utility Building and Automotive Repair Shop were shared jointly, and that parking space was allotted for Forest Service, BLM, and GSA vehicles.

The Forest Service, BLM, and GSA have continued to share the site and buildings through the present. Efforts to assign one building to each agency never proved successful.<sup>24</sup> A 1987 Facilities Master Plan noted that the Forest Service was responsible for the three original buildings although use of the space was shared: the WCF and GSA used the Automotive Repair Shop for auto repair and maintenance, while the Forest Service road crew used the south wing of the building for office space and a woodworking shop. By about 1990, all WCF equipment on the Dixie, Uinta and Fishlake National Forests was serviced by the Cedar City repair shop, which was still shared with GSA under an MOU.<sup>25</sup>

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<sup>22</sup> Memorandum from Glenn Bradley, Chief of Lands Management, Dixie National Forest, to Regional Forester, 9 January 1974, USDA Forest Service, Region 4 files.

<sup>23</sup> Memorandum from William G. Leavell, Associate State Director, BLM, to State Director, BLM, 6 December 1974, USDA Forest Service, Dixie National Forest files.

<sup>24</sup> Dale Peterson interview, 8 April 2009.

<sup>25</sup> Ibid.

Today, of the three original buildings on site, only the Automotive Repair Shop is actively used.

## PART II. ARCHITECTURAL INFORMATION

### A. General Statement:

1. Architectural character: The original, unbuilt design was a good example of the Art Deco style applied to an industrial building. Major modifications resulted in a building with simple Modernistic massing and details, particularly in the main shop. The utilitarian south wing lacks these refinements and is both incongruous with and awkwardly joined to the main shop, reflecting the hasty nature and economizing intent of the modifications.

2. Condition of fabric: Good, due to the inherent durability of the primary building materials (concrete and steel). Deferred maintenance has resulted in some damage to vulnerable wooden elements like eaves on the exterior. On the interior, the south (office) wing is dated and disused.

### B. Description of Exterior:

1. Overall dimensions: 157'-2" x 50'-2" (main shop); 60'-4" x 35'-11" (office wing); 24'-0" x 19'-11" (coal storage dock). The building is roughly T-shaped, with the main shop forming the head of the T. The entire building is one story tall, but the high, open ceiling of the main shop gives it greater height than the south wing.

2. Foundations: Poured, reinforced concrete stem wall and slab foundation, with footings beneath the columns of the main shop and under the walls of the office wing. Footing dimensions varied depending on column or wall location; see drawings from July 6-7, 1939. In 1942, to support walls damaged by settlement, much broader footings measuring 6'-0" x 4'-6" were poured beneath the original column footings on the south and east walls of the main shop. New footings measuring 2'-0" wide were also poured in 4'-0" sections beneath the east and south walls of the office wing. Plans also specified resurfacing the entire floor slab with three inches of concrete, but it is unclear if this work was completed.

3. Walls: The main shop and south wing walls are of reinforced poured concrete, 6" wide and painted off-white. Marks from board formwork are visible on both the exterior and interior wall faces. In 1942, the two south bays on the east end of the main shop were re-poured to repair damage caused by settlement; no form marks are visible but a cold joint exists at about mid-height on the bays. On the end walls of the shop, above the eave line, walls are wood-framed and finished with cement-based stucco over metal lath.

The original coal dock walls, about 4' high, are of poured concrete. In 1942, wood-framed upper walls were added and finished with cement-based stucco over wire lath. All walls are presently painted off-white.

4. Structural systems, framing: The floor in all parts of the building is composed of reinforced, poured concrete slabs. The structural system of the main shop is post and beam with reinforced, poured concrete posts at 12' intervals around the perimeter of the building; beams are composed of paired 2" x 10" boards. The posts support 12 steel bowstring roof trusses that span the width of the shop (see the July 6, 1939, drawing in HABS No. UT-139, Supplemental Material, Figure 7, and also the HABS detail drawings prepared for this project for complete illustrations). Patented in 1841 by Squire Whipple, the bowstring truss was commonly used for bridge construction and was later adapted to span the wide spaces of commercial, industrial, and military buildings (e.g., airplane hangars). Tubular metal struts and cross bracing at the level of the bottom chords provides lateral support. The end walls support simple wood-framed trusses with verticals at 16" on center and no diagonals.

The south wing is composed of poured in place, reinforced concrete slab walls that support a wood-framed, low-pitched gable roof. The coal dock is composed of concrete and wood-framed walls that support a wood-framed shed roof.

5. Chimney: A single stack serves the coal-fired boiler near the south end of the south wing. Originally the stack was composed of reinforced, poured concrete with a rectangular cross section, set on a concrete plinth. The stack was replaced after 1965 with a cylindrical welded metal stack; a low portion of the concrete plinth was retained.

#### 6. Openings

a. Doorways and doors: The original man doors on all parts of the building were two-paneled wood doors with six lights, hung singly and in pairs. The exception was the boiler room sliding door, which hung on a metal track and had four panels and 18 lights (see original drawing ca. 1939). Steel doors with single-pane glazing have replaced the original man doors in the main shop. The door and sidelight on the west side of the south wing replaced four-light double doors (themselves a replacement for the original six-light doors) in the 1970s. The door opening and four-light, paneled wood double doors on the south wall of the shop are not original but were an early addition when the interior of the south wing was reconfigured. The boiler room door is the original but has been reinforced with a metal plate over the paneling.

The original overhead garage doors were of paneled wood with three rows of wired glass glazing (for a total of 18 lights). These were replaced with unglazed, ridged metal doors in 1991.

b. Windows: The steel, multi-paned windows are composed of fixed panes surrounding an awning-type functional panel. The windows vary in size and configuration from the very large shop windows, composed of 20-light center panels with eight-light functional awnings flanked by 15-light fixed windows, to a nine-light window in the south wing with a six-light functional awning. The windows have wood lintels (masked by the wood eaves) and canted concrete sills.

All windows are original with two exceptions. In the western-most bay of the north wall, the garage door was removed between May 1960 and August 1965 and replaced with large, fixed metal windows very similar in appearance to the original windows. And the original multi-paned wood windows of the coal dock have been replaced with painted sheets of plywood.

The end walls of the main shop have wood-framed, rectangular vents fitted with fixed wood louvers. These are backed by functional wood shutters that are operated from the building's interior.

## 7. Roof:

a. Shape, covering: The segmentally arched roof over the main shop is covered with asphalt shingles on the south side and torch-down asphalt roofing on the north side. The bent wood boards that form the roof deck are visible on the interior and run perpendicular to the long axis of the roof (i.e., they span over the arch); they are supported by wood joists whose ends are doubled over the steel roof trusses. The gable roof of the south wing has a very low pitch while the coal dock has a contiguous, low-pitched shed roof. Both roofs are wood-framed and have exposed wood decks in most areas, covered by built-up (tar and gravel) roofing.

b. Eaves: The main shop has wood eaves on the long sides and raised stucco rakeboards over metal lath on the end walls. The wood eaves of the south wing are similar to the main shop, while the wood eaves of the coal dock are simpler and lack a soffit. See 2009 drawings for cross sections and details. All wood eave elements are painted off-white. Photographs through the early 1960s indicate that the building was constructed and maintained without a roof drainage system, but metal gutters and downspouts have since been added to the long walls of the main shop, the east and west walls of the south wing, and the north and east walls of the coal dock.

C. Description of Interior:

1. Floor plans: The main shop has an open floor plan, although a small, wood-framed wire cage has been built in the southeast corner for secure storage. The south wing has been reconfigured at least once as described under "Alterations and Additions," above. See floor plans from July 6-7, 1939 (included as HABS No. UT-139, Supplemental Material, Figures 5-8) and 2009 for comparison.
2. Ramps and stairs: A short concrete ramp leads from the shop into the slightly raised south wing. Another short ramp slopes down from the man door in the south wall of the main shop to the floor level, which is slightly below grade. The current office is accessed from the shop via a single step. All other openings are at grade.
3. Flooring: All floors are of reinforced, poured concrete. The shop floor was poured in three roughly equal sections and sloped toward a circular floor drain at the center of each section. Three rectangular trench drains were built into the floor parallel with the south wall and one perpendicular to the north wall. Two pit drains covered by steel plates were built into the floor in the southwest corner. In the south wing, the office and washroom floors have been covered with green vinyl tile.
4. Wall and ceiling finish: Most of the walls in the main shop are of unpainted and unfinished poured concrete. The arched sections of the gable ends are finished with wood sheathing laid diagonally toward the center of the building. In the south wall, where the south wing adjoins, the eastern two-thirds of the wall are finished with painted, vertical wood paneling with cement-based plaster on the upper portion of the wall. The west third has unpainted wood paneling beneath the office window and around the door, and cement-based plaster above the window and door.

The walls of the south wing are finished with a variety of materials. A small section of plastered and painted concrete is located under the north window in the west wall of the office; this is probably the original wall treatment. Unpainted vertical wood paneling (ca. 1960s or 1970s) covers all other walls of the office and also all interior wood-framed partition walls. The partition walls of the washroom are finished with the same paneling but painted. All exterior walls and all walls of the boiler room are of unfinished poured concrete. The coal dock walls are of poured concrete on the lower portion and horizontal shiplap siding on the upper walls.

The ceilings of the main shop and the coal dock are unfinished; the roof framing systems (trusses and rafters respectively) and wood roof decks are visible. The south wing has a variety of finishes, including metal lath and plaster in the boiler



room and the office (the boiler room plaster is original while the textured ceiling of the office is newer), wallboard ceilings in the hall, the closed storage rooms, and the washroom (all newer), and exposed roof framing in the open storage room and the wood shop.

5. Openings:

a. Doorways and doors: Interior doorways have simple, modern trim and wooden hollow-core doors dating to the mid-1960s or 1970s.

b. Windows: Windows have no trim. Casings and sills are formed by the concrete walls while lintels are formed by doubled dimensional lumber. The fixed, multi-paned steel windows between the office and the main shop were originally arranged as a center window of 12 lights flanked by two windows of nine lights. When a door was added between the office and the shop, it appears that one of the narrow windows was discarded, the large center window was shifted to the east, and the second narrow window was placed between the large window and the doorway.

6. Mechanical equipment:

a. HVAC: The original (but much repaired) coal-fired steam boiler in the Automotive Repair Shop heats both that building and the Utility Building (via underground pipes). The boiler was manufactured by the H. B. Smith Company of Westfield, Massachusetts, and plates on the boiler indicate that it is either a 450 or 451 Mills Boiler. Coal is fed into the boiler by a mechanical stoker that has been routed through the original exterior window between the boiler room and the coal dock. The main steam pipe runs north across the ceiling of the south wing and into the main shop; secondary steam lines run to Modine unit heaters that hang from the bottom chords of the trusses. (In the 1990s, the asbestos-wrapped pipes were clad in plastic sleeves to abate health hazards). At least five of the heaters in the main shop may be early or original to the system. Another ceiling-mounted unit heater is located in the wood shop. The main steam return line is buried beneath the floors of the shop and south wing. The boiler also heats water in a storage tank in the boiler room; this provides hot water for the building. A secondary steam line leads to an original steam whistle near the south wall of the main shop.

Additional original heating elements include two floor-mounted steam radiators, one near the west wall of the office and one near the east wall of the north storage room. The latter probably heated the original washroom, which has since been moved further south.

In about 2007, a used oil heater was installed along the south wall of the main shop to supplement the erratic steam boiler. This system has its own problems and is not currently in use.

Air conditioning is supplied to the office by a window-mounted unit in the window on the west wall. A ventilation fan for the wood shop is mounted in the south window of the west wall.

Four circular metal ventilation fans are located along the ridge of the main shop. Photographs from ca. 1939 illustrate that there were originally no fans (see HABS No. UT-139, Supplemental Material, Figures 15-17), but it is not clear when the present fans were installed. Disused cut-outs in the roof deck indicate that several generations of ventilating systems have been employed in the main shop.

b. Lighting: Surface-mounted metal conduit supplies electricity to the building. Five types of light fixtures were specified on the drawings dated May 1-2, 1939, but it is unclear if all of these fixtures were used. In the shop, all of the original fixtures were replaced with fluorescent strip lighting in the early 1990s. Two original fixtures with green metal reflectors remain on the south and west exterior walls of the main shop.

c. Plumbing: Plumbing includes that described for the steam heat system as well as surface-mounted pipes for a compressed air system. Water lines are also surface-mounted while waste pipes and drains are built into and/or under the concrete floors. All washroom fixtures date to the 1960s or 1970s. Details on the water supply and waste disposal systems are provided in the drawings from April 28, 1939, although it is not certain how faithfully the designs were executed. The septic field depicted on the drawings has been abandoned and the site is now connected to the city sewer system.

d. Vehicle lifts: Two vehicle lifts were built into the floor of the main shop, one near the east end of the south wall and one near the center of the north wall. Both are now disused in favor of a surface mounted lift located in the west half of the building.

D. Site

1. Historic landscape design: The landscaping around the shop is confined to paving patterns and reflects the original site design and the improvement plan made in 1942. The original 1939 concrete paving is still in place around the west end of the building. Concrete paving probably dating to 1942 remains around the east end. Asphalt paving is present around most of the south side of the building; regular cracking patterns indicate that, at least in some areas, it is covering 1942-

era concrete. A graveled and perhaps oiled driveway borders the north side of the building. This area was apparently not paved with concrete as specified in the 1942 plan but a narrow strip of asphalt was later placed against the north wall, possibly to enhance drainage and prevent soil erosion prior to the installation of gutters. The present paving pattern is identical to that marked on BLM site plans dated August 6, 1963.

### PART III. SOURCES OF INFORMATION

See HABS No. UT-139.

### PART IV. PROJECT INFORMATION

See HABS No. UT-139.